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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,100	07/06/2004	Katsuo Sugahara	09852/0201465-US0	5559
7278	7590	06/09/2006	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			ALEXANDER, MICHAEL P	
			ART UNIT	PAPER NUMBER

1742

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/501,100	Applicant(s) SUGAHARA, KATSUO	
	Examiner Michael P. Alexander	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 4-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim(s) 1-26 is/are pending.

Election/Restrictions

Claims 4-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 26 May 2006.

Claim Objections

Claims 1-3 are objected to because of the following informalities: the claims do not specify whether the percent is measure by weight percent, by atomic percent or by some other method. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1742

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuo (JP 06-128671).

Regarding claim 1, Kazuo teaches (0001, abstract, Tables 1-2) a nickel based alloy comprising: 38-45% Cr; 0.5-5.0%, in total, of one or more of Mo, W and V; up to 0.1% Mg; up to 1.0% Mn; up to 0.07% C; which overlaps with the claimed amounts of Cr, Mo, Mg, Mn, and C, which is prima facie evidence of obviousness. See MPEP 2144.05 I. It would have been obvious to one of ordinary skill in the art to select the desired amounts of the elements from the ranges disclosed by Kazuo because Kazuo teaches the same utility throughout the disclosed range.

With respect to the claimed nitrogen range in claim 1, the Examiner notes that all of the disclosed embodiments have the claimed range of nitrogen, which would be evidence that Kazuo anticipated the claimed nitrogen range or evidence of the obviousness of the claimed range of nitrogen.

With respect to the recitation of having "excellent stress corrosion cracking resistance relative to supercritical water environments" in claim 1, the Examiner asserts that the alloy of Kazuo would inherently have such properties because Kazuo teaches the substantially same composition as that of the claimed invention. See MPEP 2112.01 I.

With respect to the recitation that "Mg, N and Mn are jointly incorporated such that the crystal phase stability of the Ni fcc lattice is improved" in claim 1, the Examiner asserts that the alloy of Kazuo would inherently have such properties because Kazuo

Art Unit: 1742

teaches substantially the same composition as that of the claimed invention. See MPEP 2112.01 I.

Regarding claim 3, Kazuo teaches (0001) forming the alloy into a thick plate, round bar or pipe, which would be members for supercritical water process reaction apparatus.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suarez et al. (US 6,106,643) in view of any one of Bieber et al. (US 3,619,182), Olson (US 3,619,183), Baldwin et al. (US 3,918,964) or Peterson (US 3,984,239).

Regarding claims 1-2, Suarez teaches (Table 7) a nickel based alloy inherently having excellent corrosion resistance relative to supercritical water environments containing inorganic acids (see MPEP 2112.01 I) comprising: 42-52% Cr; 0-1% Mo; 0.003-0.03% Mg; 0-1% Mn; 0-0.1% C; 0-1% Fe; and 0-1% Si, which overlaps with the claimed ranges, which is prima facie evidence of obviousness. See MPEP 2144.05 I. It would have been obvious to one of ordinary skill in the art to select the desired amount of the elements from the ranges of Suarez because Suarez teaches the same utility throughout the disclosed ranges.

Still regarding claims 1-2, Suarez does not specify the nitrogen content. However, nitrogen is well-known impurity in nickel alloys and should be minimized to as low as possible as evidenced by Bieber (col. 3 lines 1-8), Olson (col. 2 lines 22-49), Baldwin (col. 4 lines 20-43) or Peterson (col. 3 lines 32-43). *Mere purity of a product, by itself, does not render the product unobvious. Ex parte Gray, 10 USPQ2d 1922 (Bd. Pat. App. & Inter. 1989).* It would have been obvious to one of ordinary skill in the art to

Art Unit: 1742

modify the method of Suarez by minimizing the nitrogen content to within the claimed range because such impurities should be minimized to as low as possible as taught by the cited references.

With respect to the recitation that "Mg, N and Mn are jointly incorporated such that the crystal phase stability of the Ni fcc lattice is improved" in claims 1-2, the Examiner asserts that the alloy of Suarez would inherently have such properties because Suarez teaches substantially the same composition as that of the claimed invention. See MPEP 2112.01 I.

With respect to the alloy being in the form of a member for a supercritical water process reaction apparatus in claim 3, Suarez teaches (col. 1 lines 40-45) forming the alloy into a wire, which would be a member for supercritical water process reaction apparatus.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Art Unit: 1742

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 15 of copending Application No. 10/546,130. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 15 of the copending application teaches all the limitation of claims 13, with the excellent corrosion resistance and joint incorporation being inherent because of equivalent compositions. See MPEP 2112.01 I.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Alexander whose telephone number is 571-272-8558. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V. King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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